**Report Date:** 30 Oct 2014

# Summary Report for Individual Task
# 091-94R-1120

## Repair Infrared Countermeasures Set AN/ALQ-144 V(*)
## Status: Approved

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**Condition:** You are in an Operational Environment (OE) with a non-mission capable Countermeasure Set AN/ALQ-144 V(*) that has been submitted to your Shop along with DA Form 2407, Maintenance Request and DA Form 2404, Equipment Inspection and Maintenance Worksheet. Your supervisor has assigned the work order to you for repair. At your workstation you have the following items: Countermeasure Test Set AN/ALM-178; Microwave Frequency Counter TD-1225A(V)2/U; Power Supply 28 V dc, 60-amp; Dual-trace Oscilloscope AN/USM-488; Digital Multimeter AN/PSM-45A; TK-100/G Tool Kit ; Torque Wrench PN F120015; Spanner Wrench PN AN/8514-1; Stopwatch, Type BTI; Vacuum Cleaner WC521; TM 11-5865-200-34-1; TM 11-5865-200-34-2; TM 11-5865-200-34P; DA Form 2404; DA Form 2407; Local SOP; and DA Pam 738-751, Functional Users Manual for the Army Maintenance Management System Aviation. NOTE: Substitutions for equipment may be made per Test Equipment Modernization ( TEMOD) publications. Some iterations of this task should be performed in MOPP 4.

**Standard:** Restore the AN/ALQ-144 V(*) to fully mission capable condition per TM 11-5865-200-34-1, TM 11-5865-200-34-2 and TM 11-5865-200-34P. Complete DA Form 2407 per DA Pam 738-751 without error.

**Special Condition:** None

**Safety Risk:** Low

**MOPP 4:** Sometimes

**Task Statements**

**Cue:** Your supervisor has directed you to repair a non-mission capable Infrared Countermeasures Set AN/ALQ-144 V(*) that was submitted to your shop. You are to correctly complete DA Form 2407.

## DANGER

None

# WARNING

HIGH VOLTAGE is used in the operation of this equipment.
DEATH ON CONTACT may result if personnel fail to observe safety precautions.

Never work on electronic equipment unless there is another person nearby who is familiar with the operation and hazards of the equipment and who is competent in administering first aid. When the technicians are aided by operators, they must be warned about dangerous areas.

Whenever possible, the power supply to the equipment must be shut off before beginning work on the equipment. Take particular care to ground every capacitor likely to hold a dangerous potential. When working inside the equipment, after the power has been turned off, always ground every part before touching it.

Be careful not to contact high-voltage connections or 115-Vac input connections when installing or operating this equipment.

Whenever the nature of the operation permits, keep one hand away from the equipment to reduce the hazard of current flowing through the body.

Do not be misled by the term "low voltage." Potentials as low as 50 volts may cause death under adverse conditions.

Compressed air is dangerous and can cause serious bodily harm if protective means or methods are not observed to prevent a chip or particle (of whatever size) from being blown into the eyes or unbroken skin of the operator or other personnel. Compressed air shall not be used for cleaning purposes except where it is reduced to less than 30 pounds per square inch gauge (30 psig) and then only with effective chip guarding and personnel protective equipment (industrial safety glasses and full faceshield).

DO NOT use compressed air to dry parts when TRICHLOROTRIFLUOROETHANE has been used.

USE OF CLEANING SOLVENT
Trichlorotrifluoroethane, trichloroethane and similar chemical solvents will no longer be used for ordinary cleaning of equipment. These substances threaten public health and the environment by destroying ozone in the earth's upper atmosphere. Suitable nonhazardous cleaning materials will be used instead, such as a clean cloth, water and mild detergent.

## CAUTION

Always stop transmitter operation by placing the MTM system power switch to its OFF position or the OCU ON/OFF switch to its OFF position. NEVER stop operation by de-energizing your power source.

The A6, A7, A8 and A9 circuit card assembly contains parts and assemblies sensitive to damage by Electrostatic Discharge (ESD). Use ESD precautionary procedures when touching, removing, or inserting a card.

**Remarks:** None

**Notes:** None

**Performance Steps**

1. Obtain all required tools, test equipment and reference materials.
2. Complete appropriate blocks on DA Form 2407 per DA Pam 738-751.
3. Perform visual inspection.
4. Set up test equipment per TM 11-5865-200-34-1.
5. Verify faults listed on DA Form 2407 using the appropriate troubleshooting chart per TM 11-5865-200-34-1.
6. Perform troubleshooting the AN/ALQ-144 V (*) using the troubleshooting chart in TM 11-5865-200-34-1.
7. Identify defective component (s) per TM 11-5865-200-34-1 and TM 11-5865-200-34P.
8. Replace defective component (s) per TM 11-5865-200-34-1 and TM 11-5865-200-34P.
9. Perform operational checks per TM 11-5865-200-34-1.
10. Complete appropriate blocks on DA Form 2407 per DA PAM 738-751.
11. Tag defective parts for turn-in per DA Pam 738-751.
12. Notify supervisor upon completion of task.

(Asterisks indicates a leader performance step.)

**Evaluation Guidance:** Score the Soldier GO if all performance measures are passed. Score the Soldier NO-GO if any performance measure is failed. If the Soldier fails any performance measure, show the Soldier what was done wrong and how to do it correctly.

**Evaluation Preparation:** Ensure all items required in the condition statement (or appropriate substitutions) are on hand and all safety requirements are met.

| PERFORMANCE MEASURES | GO | NO-GO | N/A |
|---|---|---|---|
| 1. Obtained all required tools, test equipment, and reference materials. | | | |
| 2. Completed appropriate blocks on DA Form 2407 per DA PAM 738-751. | | | |
| 3. Performed visual inspection. | | | |
| 4. Set up test equipment per TM 11-5865-200-34-1. | | | |
| 5. Verified faults listed on DA Form 2407 using the appropriate troubleshooting chart per TM 11-5865-200-34-1. | | | |
| 6. Performed Troubleshooting the AN/ALQ-144 V(*) using the troubleshooting chart in TM 11-5865-200-34-1. | | | |
| 7. Identified defective component (s) per TM 11-5865-200-34-1 and TM 11-5865-200-34P. | | | |
| 8. Replaced defective component (s) per TM 11-5865-200-34-1 and TM 11-5865-200-34P. | | | |
| 9. Performed operational checks per TM 11-5865-200-34-1. | | | |
| 10. Completed appropriate blocks on DA Form 2407 per DA PAM 738-751. | | | |
| 11. Tagged defective component (s) for turn-in per DA PAM 738-751. | | | |
| 12. Notified supervisor upon completion of task. | | | |

**Supporting Reference(s):**

| Step Number | Reference ID | Reference Name | Required | Primary |
|---|---|---|---|---|
| | DA FORM 2404 | EQUIPMENT INSPECTION AND MAINTENANCE WORKSHEET | Yes | No |
| | DA FORM 2407 | MAINTENANCE REQUEST | Yes | No |
| | DA FORM 2407-1 | MAINTENANCE REQUEST CONTINUATION SHEET | No | No |
| | DA PAM 738-751 | Functional Users Manual for the Army Maintenance Management System-Aviation (TAMMS-A) | No | No |
| | TM 11-5865-200-12 | OPERATORS AND AVIATION UNIT MAINTENANCE MANUAL FOR AVIATION UNIT MAINTENANCE (AVUM) COUNTERMEASURES SETS, AN/ALQ-144A(V)1 (NSN 5865-01-299-5859) AND AN/ALQ-144A(V)3 (5865-01-299-5860) {NAVAIR 16-35ALQ144 | Yes | No |
| | TM 11-5865-200-34-1 | INTERMEDIATE DIRECT SUPPORT AND INTERMEDIATE GENERAL SUPPORT MAINTENANCE MANUAL FOR AVIATION INTERMEDIATE MAINTENANCE (AVIM) FOR COUNTERMEASURES SETS AN/ALQ-144A(V)1 (NSN 5865-01-299-5859) AND AN/ALQ-144A | Yes | No |
| | TM 11-5865-200-34-2 | (S) INTERMEDIATE DIRECT SUPPORT AND INTERMEDIATE GENERAL SUPPORT MAINTENANCE MANUAL FOR AVIATION INTERMEDIATE MAINTENANCE (AVIM) (U) FOR COUNTERMEASURES SETS AN/ALQ-144A(V)1 (NSN 5865-01-299-5859) AND AN/ | No | No |
| | TM 11-5865-200-34P | DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST (INCLUDING DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS) FOR COUNTERMEASURES SETS, AN/ALQ-144(V)1 (NSN 5865-01-299-58 | No | No |

**Environment:** Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects. Refer to FM 3-34.5 Environmental Considerations and GTA 05-08-002 ENVIRONMENTAL-RELATED RISK ASSESSMENT. In an Operational Environment, it is the responsibility of the Soldier and DA Civilians to protect the environment from damage. All operations must conform to the Army Environmental Program, TC 3-34.489 (The Soldier and the Environment), FM 3-100.4 (Environmental Consideration in Military Operations), and local, state, and federal environmental policies, the Clean Air Act (CAA), CAA amendments, National Ambient Air-Quality Standards (NAAQS), as well as Occupational Safety and Health Administration (OSHA), Hazard Communication Standard for Industry, 29 CFR, part 1910.

**Safety:** In a training environment, leaders must perform a risk assessment in accordance with ATP 5-19, Risk Management. Leaders will complete the current Deliberate Risk Assessment Worksheet in accordance with the TRADOC Safety Officer during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Protection, FM 3-11.5, Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Decontamination. Incidental to Army operations and activities, all operations must provide for public safety, safe and healthful work places, procedures, and equipment. Observe all safety precautions when using lifting devices and handling heavy parts. Observe all safety and/or environmental precautions regarding electricity, radiation, radio frequency (RF), fuel, lubricants, high pressures, and refrigerants. Provide ventilation for exhaust fumes during equipment operation and use hearing protection when required in accordance with AR 385-10, (The Army Safety Program) the Clean Air Act (CAA), CAA amendments, National Ambient Air-Quality Standards (NAAQS), and the Occupational Safety and Health Administration (OSHA) Hazard Communication standard.

**Prerequisite Individual Tasks :** None

**Supporting Individual Tasks :** None

**Supported Individual Tasks :** None

**Supported Collective Tasks :** None